

## EAST Search History

| Ref # | Hits | Search Query   | DBs  | Default Operator | Plurals | Time Stamp       |
|-------|------|--|--|------------------|---------|------------------|
| S10 3 | 7    | (beam adj gain near4 constant)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | ON      | 2007/11/13 12:01 |
| S10 4 | 63   | (beam adj5 gain near4 constant)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | ON      | 2007/11/13 12:02 |
| S10 5 | 2    | (beam adj5 gain near4 constant)<br>and (arrival adj5 direction)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | ON      | 2007/11/13 16:17 |
| S10 6 | 0    | (beam adj5 gain near4 remain)<br>and (arrival adj5 direction)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | ON      | 2007/11/13 12:05 |
| S10 7 | 0    | (correct adj antennna adj5 weight)<br>with (beam adj5 gain near4<br>constant\$1) and (arrival adj5<br>direction) | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | ON      | 2007/11/13 12:05 |
| S10 8 | 1    | (correct adj antenna adj5 weight)<br>with (beam adj5 gain near5<br>constant\$1) and (arrival adj5<br>direction)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | ON      | 2007/11/13 12:06 |
| S10 9 | 1    | (correct adj antenna adj5 weight)<br>with (beam adj5 gain near5<br>constant\$1)                                  | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | ON      | 2007/11/13 12:06 |

## EAST Search History

|          |      |   |  |    |     |                  |
|----------|------|---|--|----|-----|------------------|
| S11<br>0 | 4    | (correct adj antenna adj5 weight)                                     | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2007/11/13 14:58 |
| S11<br>1 | 158  | (beam near5 gain near5 constant)                                      | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2007/11/13 15:02 |
| S11<br>2 | 2    | S111 and (constraint near5 process)                                   | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2007/11/13 15:00 |
| S11<br>3 | 20   | S111 and (constraint or restraint)                                    | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2007/11/13 15:00 |
| S11<br>4 | 16   | (beam near5 gain near5 constant) and (arrival near5 direction)        | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2007/11/13 16:15 |
| S11<br>5 | 5852 | (455/277.2,140,437,63.1,25,63.4,13.3,107,120,132,226.1).ccls.         | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2007/11/13 16:17 |
| S11<br>6 | 1    | S115 and (beam adj5 gain near4 constant) and (arrival adj5 direction) | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2007/11/22 23:33 |
| S11<br>7 | 114  | (beam near5 gain near5 constant)                                      | US-PGPUB;<br>USPAT   | OR | OFF | 2007/11/13 20:03 |

## EAST Search History

|          |     |  |  |    |    |                  |
|----------|-----|--|--|----|----|------------------|
| S11<br>8 | 14  | S117 and constraint                                    | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/11/13 20:05 |
| S11<br>9 | 0   | S117 and (correct near5 angel<br>near5 arrival)        | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/11/13 20:06 |
| S12<br>0 | 0   | S117 and (correct\$3 near5 angel<br>near5 arrival)     | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/11/13 20:07 |
| S12<br>1 | 1   | S117 and (correct\$3 near5 arrival<br>near5 direction) | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/11/13 20:08 |
| S12<br>2 | 15  | S117 and (doa or (arrival near5<br>direction))         | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/11/13 20:09 |
| S12<br>3 | 431 | (beam same gain adj4 constant)                         | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/11/22 23:00 |
| S12<br>4 | 8   | (beam adj5 gain adj constant)                          | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/11/22 23:00 |

## EAST Search History

|          |    |  |  |    |    |                  |
|----------|----|--|--|----|----|------------------|
| S12<br>5 | 1  | (constraint adj5 process\$3) same<br>(beam adj5 gain near4 constant)<br>and (arrival adj5 direction) | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/11/22 23:34 |
| S12<br>6 | 2  | (beam adj5 gain near4 constant)<br>and (arrival adj5 direction)                                      | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/11/22 23:35 |
| S12<br>7 | 39 | (gain near4 constant) and (arrival<br>adj5 direction)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/11/22 23:45 |
| S12<br>8 | 1  | (455/277.2,140).ccls. and (gain<br>near5 constant) and (arrival adj5<br>direction)                   | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/11/22 23:52 |
| S12<br>9 | 11 | (455/277.2,140).ccls. and (arrival<br>adj5 direction)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/11/22 23:46 |
| S13<br>0 | 0  | (gain and desired near5 signal<br>near5 constant) and (arrival adj5<br>direction)                    | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/11/22 23:53 |
| S13<br>1 | 0  | (gain and desire\$3 near5 signal<br>near5 constant) and (arrival adj5<br>direction)                  | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/11/22 23:53 |

## EAST Search History

|          |     |   |  |    |    |                  |
|----------|-----|---|--|----|----|------------------|
| S13<br>2 | 146 | (gain and signal near5 constant)<br>and (arrival adj5 direction)                                | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/11/22 23:54 |
| S13<br>3 | 32  | (gain same signal near5 constant)<br>and (arrival adj5 direction)                               | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/11/23 00:01 |
| S13<br>4 | 0   | (desired near5 signal near5<br>(correct\$3 or constant)) and<br>(arrival adj5 direction)        | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/11/23 00:02 |
| S13<br>5 | 0   | (desire near5 signal near5<br>(correct\$3 or constant)) and<br>(arrival adj5 direction)         | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/11/23 00:02 |
| S13<br>6 | 446 | (signal near5 (correct\$3 or<br>constant)) and (arrival adj5<br>direction)                      | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/11/23 00:02 |
| S13<br>7 | 42  | ((signal near5 (correct\$3 or<br>constant)) with (arrival adj5<br>direction))                   | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/11/23 00:03 |
| S13<br>8 | 1   | (maintain near5 beam near5 gain<br>near5 constant) and (signal near5<br>arrival adj5 direction) | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/11/23 10:32 |

## EAST Search History

|          |         |  |  |    |     |                  |
|----------|---------|--|--|----|-----|------------------|
| S13<br>9 | 7       | (maintain near5 beam near5 gain) and (signal near5 arrival adj5 direction)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2007/11/23 10:32 |
| S14<br>0 | 7       | ("6188373"   "6208294"   "6320540"   "6385181").PN. OR ("6492958").URPN.   | US-PGPUB;<br>USPAT;<br>USOCR   | OR | OFF | 2007/11/24 20:43 |
| S14<br>1 | 3       | ("2002/0070892").URPN.   | USPAT  | OR | OFF | 2007/11/24 21:32 |
| S14<br>2 | 2       | (angle near5 arriv\$3 adj5 direct\$3 near5 constant)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2007/11/24 21:38 |
| S14<br>3 | 1676427 | (angle near5 arriv\$3 adj5 direct\$3 near5 constant) or (keep\$3 or maintain\$3 near5 beam adj gain adj6 constant)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2007/11/24 21:40 |
| S14<br>4 | 5       | (angle near5 arriv\$3 adj5 direct\$3 near5 constant) or ((keep\$3 or maintain\$3) near5 beam adj gain adj6 constant) | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2007/11/24 21:42 |
| S14<br>5 | 3       | ((keep\$3 or maintain\$3) near5 beam adj gain near6 constant)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2007/11/24 21:43 |
| S14<br>6 | 7       | (beam adj gain near6 constant)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2007/11/24 21:44 |

## EAST Search History

|          |        |  |  |    |    |                  |
|----------|--------|--|--|----|----|------------------|
| S14<br>7 | 5      | (beam adj gain adj constant)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/11/24 21:45 |
| S14<br>8 | 163095 | ((level or gain) near5 constant)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/11/24 21:46 |
| S14<br>9 | 759    | beam adj4 ((level or gain) near5 constant)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/11/24 21:58 |
| S15<br>0 | 0      | beam adj4 ((level or gain) near5 constant) and (angle near arriv\$3 adj5 direct\$3)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/11/24 21:47 |
| S15<br>1 | 1      | beam adj4 ((level or gain) near5 constant) and (angle near arriv\$3 near5 direct\$3) | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/11/24 21:47 |
| S15<br>2 | 5      | beam adj4 ((level or gain) near5 constant) and (angle near arriv\$3 or (AOA))        | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/11/24 21:47 |
| S15<br>3 | 47     | S149 and constraint  | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/11/24 22:08 |

## EAST Search History

|          |    |  |  |    |     |                  |
|----------|----|--|--|----|-----|------------------|
| S15<br>4 | 4  | S149 and (antenna adj weight)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2007/11/24 22:09 |
| S15<br>5 | 1  | S149 and (updat\$3 near5 antenna adj5 weight)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2007/11/24 22:10 |
| S15<br>6 | 6  | S149 and (updat\$3 near5 weight)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2007/11/24 22:10 |
| S15<br>7 | 12 | ("20020028694"   "20020044616"   "20020054621"   "20030128656"   "20040185783"   "20040228420"   "20040235421"   "5887038"   "6353643"   "6714584"   "6959169"   "7116702").PN. OR ("7236744").URPN. | US-PGPUB;<br>USPAT;<br>USOCR   | OR | OFF | 2007/11/24 22:21 |
| S15<br>8 | 18 | (correct\$3 adj6 antenna adj6 weight)  | US-PGPUB;<br>USPAT;<br>USOCR   | OR | OFF | 2007/11/24 22:22 |
| S15<br>9 | 24 | (correct\$3 adj6 antenna adj6 weight)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2007/11/24 22:25 |
| S16<br>0 | 3  | S159 and constraint  | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2007/11/24 22:22 |
| S16<br>1 | 3  | ("6600729"   "6614766"   "6944208").PN. OR ("7203178").URPN.   | US-PGPUB;<br>USPAT;<br>USOCR   | OR | OFF | 2007/11/24 22:46 |



## EAST Search History

|          |      |  |  |    |     |                  |
|----------|------|--|--|----|-----|------------------|
| S16<br>2 | 6161 | (370/286,342,288,289,335,342).<br>ccls.  | US-PGPUB;<br>USPAT;<br>USOCR   | OR | OFF | 2007/11/24 22:46 |
| S16<br>3 | 5    | S162 and (constraint adj5 process)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2007/11/24 22:47 |
| S16<br>4 | 16   | ("5163044"   "5550811"  <br>"5687162"   "5694388"  <br>"5734647").PN. OR ("5930229").<br>URPN. | US-PGPUB;<br>USPAT;<br>USOCR   | OR | OFF | 2007/11/24 22:54 |
| S16<br>5 | 1    | "20020070892"  | US-PGPUB;<br>USPAT;<br>USOCR   | OR | OFF | 2007/11/24 22:54 |